To: Haire, Michael[Haire.Michael@epa.gov]; Whitlock, Steve[Whitlock.Steve@epa.gov]; Curtin,

James[curtin.james@epa.gov]; Keating, Jim[Keating.Jim@epa.gov]; Monschein, Eric[Monschein.Eric@epa.gov]; Reichert, Julie[reichert.julie@epa.gov]; Goodin, John[Goodin.John@epa.gov]

From: Furtak, Sarah

**Sent:** Tue 7/2/2013 2:44:11 PM

Subject: FYI: Preliminary R10 Answers ahead of our 1:00 mtg w R10 today

From: Rueda, Helen

**Sent:** Monday, July 01, 2013 12:07 PM

To: Furtak, Sarah; Haire, Michael; Whitlock, Steve; Curtin, James

Cc: Owens, Kim; Cope, Ben; Croxton, Dave

**Subject:** Preliminary Answers with some additional information

- n Understand what happened to the 2007 draft TMDL, which may provide valuable background. (R10, All)
- o Was the 2007 TMDL <a href="http://www.deq.idaho.gov/media/571574-">http://www.deq.idaho.gov/media/571574-</a> pend oreille river temp tmdl draft 081007.pdf pulled off the street?
- § This TMDL was not "pulled off the street". The public comment period closed and the states and EPA compiled and began to address the comments. At this point an issue arose between EPA and Washington on a standards interpretation. This took two years to resolve. When this issue was settled, Washington was anxious to resume and complete the TMDL but Idaho DEQ had undergone budget cuts and loss of staff and was not able to continue work on it at that time (or since). Washington decided to continue the project as a TMDL for Washington waters. [This issue involved Washington's cool season temperature standard. Ecology issued an interpretation of this criterion which was protested by both EPA and the Kalispel Tribe. After two years of discussion Ecology's interpretation was overturned and the previous reading of the WQS, which was used in the 2007 TMDL, was also used in the 2011 TMDL.]
- o Why was the 2007 draft TMDL an Idaho-Washington-Tribal effort?
- § Both states were starting work on these TMDLs at the same time and, along with the Kalispels, were members of the Tri-State Water Quality Council. It was discussed in the council and made sense to make this a collaborative effort. Without that it may not have been possible to obtain the funding for the model development and facilitation assistance that this project received.

- o In the 2007 TMDL, it appears a day-to-day analysis (non-CFA) was employed as was the same model as the 2011 TMDL. Allocations were assigned to Albeni Falls Dam, and it appears we were able to meet WQS.
- § The Washington portion of the river was analyzed using a day to day comparison in the 2007 draft TMDL. The Idaho portion was not.
- § There was no specific assessment of impairment at the border in the 2007 draft TMDL.
- § Washington's analysis was flawed by the use of inconsistent upstream boundary conditions\* at the Idaho border in the 2007 TMDL. Washington's 2007 draft TMDL results cannot be relied on, especially in the Idaho border area. Washington required a reduction in early May at the Kalispel Reservation due to heat loading from Albeni Falls Dam in the draft 2007 TMDL, but this was an artifact of the erroneous boundary conditions.
- § In the draft 2007 TMDL Idaho set the allocation for Albeni Falls Dam to address impairment upstream of the dam, not downstream near Washington, and also to address the early May impairment at the Kalispel boundary, which was later found to be an error
- o Why was there no allocation to Albeni in the 2011 TMDL?
- § Washington state has no authority to set allocations for sources in another state. The 2011 TMDL analysis found no impairment in water coming over the Idaho border, therefore there was no assumption that reductions would be set in an Idaho TMDL to meet downstream state WQS.
- n Discuss relevant language from the Multi-Jurisdictional TMDL draft document. (Mike, Jim)
- o What is the temperature distribution throughout the river?
- o How does it meet WQS?
- o What are the implications for TMDL allocations and implementation strategies?

Discuss assessment of impairment at the border and documentation of border conditions/rationale. (All)

\*(From Army Corps comments on 2007 TMDL) Errors Introduced at Boundary Propagate Through Model Comment: The Seattle District disagrees with the position

presented in the TMDL that "The absolute accuracy (AME) of the model is not critically important when comparing scenarios, because any error in the model results would be similar between scenarios". Although such a position may be true for comparing model scenarios where vegetative cover is changed or point sources are added/removed, such logic is flawed when applied to comparisons of modeling scenarios where travel time is significantly different. Scenarios for "natural" and "existing" conditions have significantly different travel times because of the influence of Albeni Falls Dam on the hydrology of the Pend Oreille River. Therefore, any model uncertainty or error introduced at the boundary condition will propagate through the model at different rates due to travel time differences. Consequently, comparison of model data from a single cell at an instant in time from two model runs with different travel times without accounting for model uncertainty and error is not valid because errors introduced into the model will not be the same at that instant in time for the two scenarios.

Helen Rueda

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